

NEI2005 Point Source Emissions Data (facility-level)
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Emission data file: nei05_point_emissions_data.csv

These data are derived from the US EPA NEI2005 point source emission files prepared by Stuart McKeen, 17 Feb 2009.
Those files were intended for use in chemical-transport models.
Details of Stu's processing are available upon request.

In January 2010, Greg Frost aggregated Stu's point source emissions files by facility, included facility names, and reduced the list of pollutants to those given in this file.

Specific point source emissions represented here include:

- * US CEMS sources (mainly power plants with Continuous Emission Monitoring Systems) = August 2006 weekday average, from CEMS data
- * US non-CEMS sources = August 2002 weekday average, from the NEI2002
- * Mexican sources = August 1999 weekday average, from the WRAP EI for border states and USEPA SMOKE-ready files for interior states
- * Canadian sources = August 2006 weekday average, from the Canadian NPRI

Data are for all reporting emission point sources in the continental US, Mexico, and Canada between 24 and 52 degrees North latitude.

Each point source facility is identified by its text ID code, name, and latitude and longitude.

Facility names were not available for Canadian sources.

Facility latitude (degrees, N > 0) and longitude (degrees, E > 0) are unweighted averages of the coordinates of all individual release points reported for the facility.

Also reported for each facility:

- * total number of individual emission release points
- * number of release points that are upward-facing stacks
- * maximum height of any stack at each facility (in meters)

Emission data units:

- * Criteria pollutants (total NMVOC, NO_x, CO, SO₂, total primary PM₁₀, total primary PM_{2.5}, NH₃) = short tons of compound or PM per day (weight of NO_x defined as weight of NO₂ molecules) (1 short ton = 0.9072 metric ton)
- * Selected speciated VOCs = moles of compound per day
- * PMFINE (Unspeciated primary PM_{2.5}) = short tons of PM per day
- * PSO₄ & PNO₃ (PM_{2.5} sulfate and nitrate) = short tons of ion per day
- * POA & PEC (PM_{2.5} organic aerosol and elemental carbon) = short tons of Carbon per day

Emissions of other species and lumping categories in the SAPRC-99 mechanism besides those reported here are available upon request.